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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,921	11/16/2001	Noboru Oshima	925-217	7939
23117	7590	03/15/2004	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			VY, HUNG T	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,921

Applicant(s)

OSHIMA ET AL.

Examiner

Hung T Vy

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. In response to the Appeal Brief filed on 02/24/2004, claims 1- 9 are pending in this application.

Response to Arguments

2. In view of the arguments presented in the Appeal Brief filed Feb. 24 2004, prosecution on the merits is reopened to address the issues raised in the Brief. The grounds of rejections in the prior Office actions are withdrawn, and new grounds of rejection are presented here. 37 CFR 1.193 (b)(2) applies:

(2) Where prosecution is reopened by the primary examiner after an appeal or reply brief has been filed, appellant must exercise one of the following two options to avoid abandonment of the application:

(i) File a reply under § 1.111, if the Office action is not final, or a reply under § 1.113, if the Office action is final; or

(ii) Request reinstatement of the appeal. If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (§ § 1.130, 1.131 or 1.132) or other evidence are permitted.

Claim Rejections - 35 U.S.C. § 103

Art Unit: 2828

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103 (a) as being unpatentable over admitted prior art (Admission) on fig. 12 in view of Horie et al., U.S. Patent No. 6,323,052.

Regarding claims 1-5 and 8-9, admission discloses on fig. 12 as the a semiconductor laser device, comprising: an oxide formed as a protective coating on at least one light emitting end surface of a semiconductor laser chip; and an Si film (44) having a film (See paragraph 0013) formed between the at least one light emitting end surface and the oxide protective coating (See Fig 12 and paragraph 0015). The oxide protective coating comprises AlO_x (See paragraph 0015, line 4), the semiconductor laser chip has an active layer, wherein the semiconductor laser is uniform (see fig 12) but admission does not disclose the thickness of Si film and active layer containing GaAlAs. However, Horie et al. discloses the thickness of Si film of 40 \AA or less (See column 15, line 53-54 and line 67-68) and an active layer containing GaAlAs (See column 12, line 9-11). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the admission on fig. 12 to have the same thickness of Si film and active layer containing GaAlAs as taught by Horie et al. because those skilled in the art will recognize that such modification and variations can

Art Unit: 2828

be made to get no affect oscillation characteristics of laser without departing from the spirit of the invention.

With respect to claims 6-7, the methods for manufacturing the semiconductor laser device are considered as product by process steps.

5. Claims 1-9 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Horie et al., U.S. patent No. 6,323,052 in view of Kawanishi et al, U.S. Patent No. 5,208,468.

Regarding claims 1-5 and 8-9, Horie et al. disclose the a semiconductor laser device, comprising: an oxide formed as a protective coating on at least one light emitting end surface of a semiconductor laser chip; and an Si film (14) having a film (See column 15, line 53-54) thickness of 40 \AA or less (See column 15, line 67-68) formed between the at lest one light emitting end surface and the oxide protective coating (See Fig 1). The oxide protective coating comprises AlO_x (See column 16, line 19-37). The semiconductor laser chip has an active layer containing GaAlAs (See column 12, line 9-11), but Horie et al. does not disclose the semiconductor laser is uniform. However, Kawanishi et al. discloses the semiconductor laser is uniform (See fig. 1). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Horie et al. to have the active layer is uniform as taught by Kawanishi et al. because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of the invention.

Art Unit: 2828

With respect to claims 6-7, the methods for manufacturing the semiconductor laser device are considered as product by process steps.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (571) 272-1941. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hung T. Vy
Art Unit 2828

March 5, 2004



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